

PEYRONIE'S DISEASE (Induratio penis plastica)

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Summary

Seven cases of Peyronie's diseases have been reported. In 57% cases the onset of the disease was in the 4th decade of life. All the cases had painful erection along with curvature of the penis, resulting in secondary impotence. None of the patients had calcification in the penis. Brief review of the literature is given.

Peyronie's disease, also known as induratio penis plastica, is characterised by development of single or multiple fibrous plaques enveloping the cavernous sheaths of the penis. It presents clinically as painful erection and curvature of the penis. This condition was first described in 1743 by Francis de La Peyronie¹. Since its initial description, more than 2000 cases have been reported², but report of this disease is scarce from India. In the present communication we report seven cases of Peyronie's disease along with review of literature.

Peyronie's disease affects usually patients in their middle age³. The exact aetiology of this disease is not known. The process has been described as being similar to Dupytren's contracture, knuckle pads and keloids^{4, 5, 6}. Associated factors which have been incriminated are trauma^{7, 8}, genetic predisposition⁶ and abnormal tunica⁹.

The suggestion that this condition has an autoimmune etiology is gaining favour¹⁰. There is no certainty as to the nature of the biochemical changes which appear to initiate the disorder and cause distortion at the macromolecular and cellular levels or of the histological and histochemical balance and harmony of various components of connective tissue. This phase is not accomplished without considerable cell and capillary reaction and the changes that follow may be said to constitute the characteristic pathology of the disease¹⁰. An incipient vasculitis and initial lesions in the thin areolar connective tissue sleeve between the corpora cavernosa and the tunica albuginea has been reported¹¹. This is followed by fibrosis and may lead to calcification in the later stages. Histopathological picture^{12, 13} shows either a fibroplastic reaction or a dense collagen formation depending on the stage of disease. Electron microscopy studies show tissue changes similar to those seen in senescence and senility. The feeble cellular changes in fact resemble more a degenerative process than an inflammatory reaction.

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Peyronie's disease heralds the end of effective sexual life. Some workers however feel that a hopeful prognosis can be given to patients either with or without treatment because spontaneous improvement can occur from 15 months to 8 years⁴. The pain goes first, the plaque then disappears, the penis straightens and erection becomes normal⁶. To assess the efficacy of any form of treatment, in this condition is difficult because spontaneous cure has been well documented⁴. Various forms of treatment that have been tried includes surgical excision of the plaque, vitamin E systemically, superficial irradiation, local radium application, ultrasonic therapy, local dimethyl sulfoxide, chloroquine, oral potassium iodide and steroids both intralesionally and systemically^{10,14}. Recently procarbazine a cytotoxic drug has been used orally and variable¹⁰ results have been reported¹⁵.

Report of Cases

The clinical features of all the 7 patients with Peyronie's disease seen at the Dermato-venereology out patient department of All India Institute of Medical Sciences, New Delhi, are shown in Table 1. These patients reported with the complaints of painful erection, curvature of the penis (chordee), the sensation of a lump in the penis and in the late stages, impotence. The youngest patient was 21 years old, but majority of patients (57%) noted the disease in the 4th decade of life. Palpa-

tion of the penis revealed in all cases thick subcutaneous plaques of varying sizes which were firm to hard in consistency on the dorsal aspect of the shaft of the penis. None of the patients had any calcification on radiographic examination of the penis. All patients were given intralesional corticosteroid (1.5 ml of dexamethasone sodium phosphate containing 4 mg per ml with 1 ml of 1% Procaine), tab vitamin E 100 mg three times a day and tab chloroquine one tablet twice a day. The therapeutic effects were inconsistent and unsatisfactory.

Discussion

The signs and symptoms of Peyronie's disease in these patients have appeared gradually in otherwise apparently healthy individuals. Due to pain and bending of the penis on erection, patients had developed secondary impotence in the 3rd and 4th decades of life leading to anxiety and depression. In the West¹⁰ the onset of the disease is most frequently reported in the 5th and 6th decades of life. In cases with long duration of illness, calcification is a usual feature, and this is easily diagnosed and demonstrated by xero-radiography method¹⁰ which possesses advantages over conventional x-ray techniques because it brings out considerably contrast between areas with little differences in density. Chensney¹⁰ could demonstrate calcification in 33 (18%) out of 216 patients with

TABLE 1
Clinical features of the patients

Age	Duration	Pain	Curvature	Plaque	Impotence
21	12 months	+	+	+	+
25	18 months	+	+	++	++
34	6 months	+	+	+	+
35	6 months	+	+	+	+
36	4 months	+	+	+	+
40	8 months	+	+	+	++
43	10 months	+	++	++	++

Peyronie's disease by xeroradiography technique. In the present series we could not demonstrate calcification in any of the seven cases on routine X-ray examination of the penis. Treatment by various methods did not show much improvement though some relief was obtained with intralesional corticosteroid. As the intralesional injection of corticosteroid alone is painful, combining it with 1% procaine has helped in relieving the symptoms for a short time. There is a divergence of opinion on one vital question, namely should the disease be treated? As with many other conditions remissions may occur from time to time, often unpredictably. Conflicting reports on the therapeutic response to a variety of agents seems to indicate that no method is a completely satisfactory one. In a reply to a questionnaire, 39 authors considered local steroid injections along with local anaesthetic as the therapy of choice¹⁰⁻¹⁶.

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